



Developing an Open Educational Resource for Interprofessional Education (IPE).

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- » The development of an online, digitally rich IPE resource which supports an IPE learning experience.
 - » Employs family narratives, authentic voices and cultural insights to help students visualise and identify with the patient and client scenarios.
 - » Sharing of the IPE open educational resource (OER) via Jorum.
 - » Supports HEI sector efficiency and capacity building by the development of a quality IPE Open Educational Resource (OER) which may be adopted, adapted and re-purposed.
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- » Builds upon policies discussed at Open Scotland Summit (2013) which endorsed - Open Educational Policy approaches as being the desired norm.
 - » “Open Policies can develop Scotland’s unique education offering, support social inclusion and inter-institutional collaboration and sharing and enhance quality and sustainability.”
 - » Range of hubs and repositories but (Jisc) Jorum is the largest UK repository (www.Jorum.ac.uk)
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Jorum

Jorum is a **shared service for discovering open educational resources** that can be used in teaching and learning.

Enables the community to **share** resources under CC open licences.

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Jorum Updates

University of Leeds collaboration produces Jorum's first OER
Today sees the launch of the University of Leeds' Open W

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- » Online virtual community developed by academics at Glasgow Caledonian University (GCU).
 - » GCU has embedded IPE into modules across every stage of 4 year UG degree programmes.
 - » GCU has ~ 900 social work and healthcare students working collaboratively on IPE scenarios.
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- » Enables contextualisation of student learning with authentic voice being added to the subject matter.
 - » Inclusion of virtual families helps the student to see the “person in situation” rather than as a distant, objective based academic activity.
 - » Improves “visualisation, recognition and identification by the student.”
 - » West, J. (2008) Authentic Voices : Utilising Audio and Video within an Online Virtual Community. Social Work Education: The International Journal, 27:6, 665-670.
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Fictitious city modelled on London.

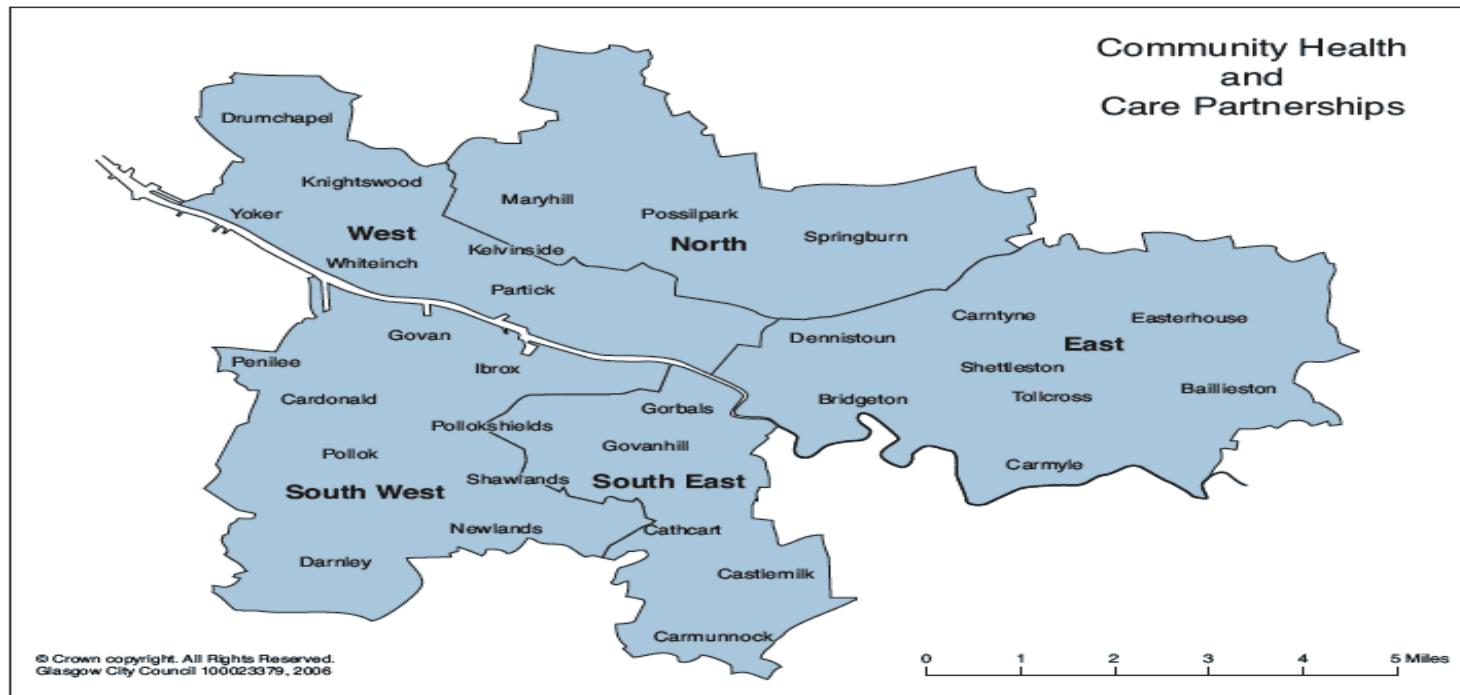
Uses census data.

Has a bank of randomised FAQs and formative quizzes.

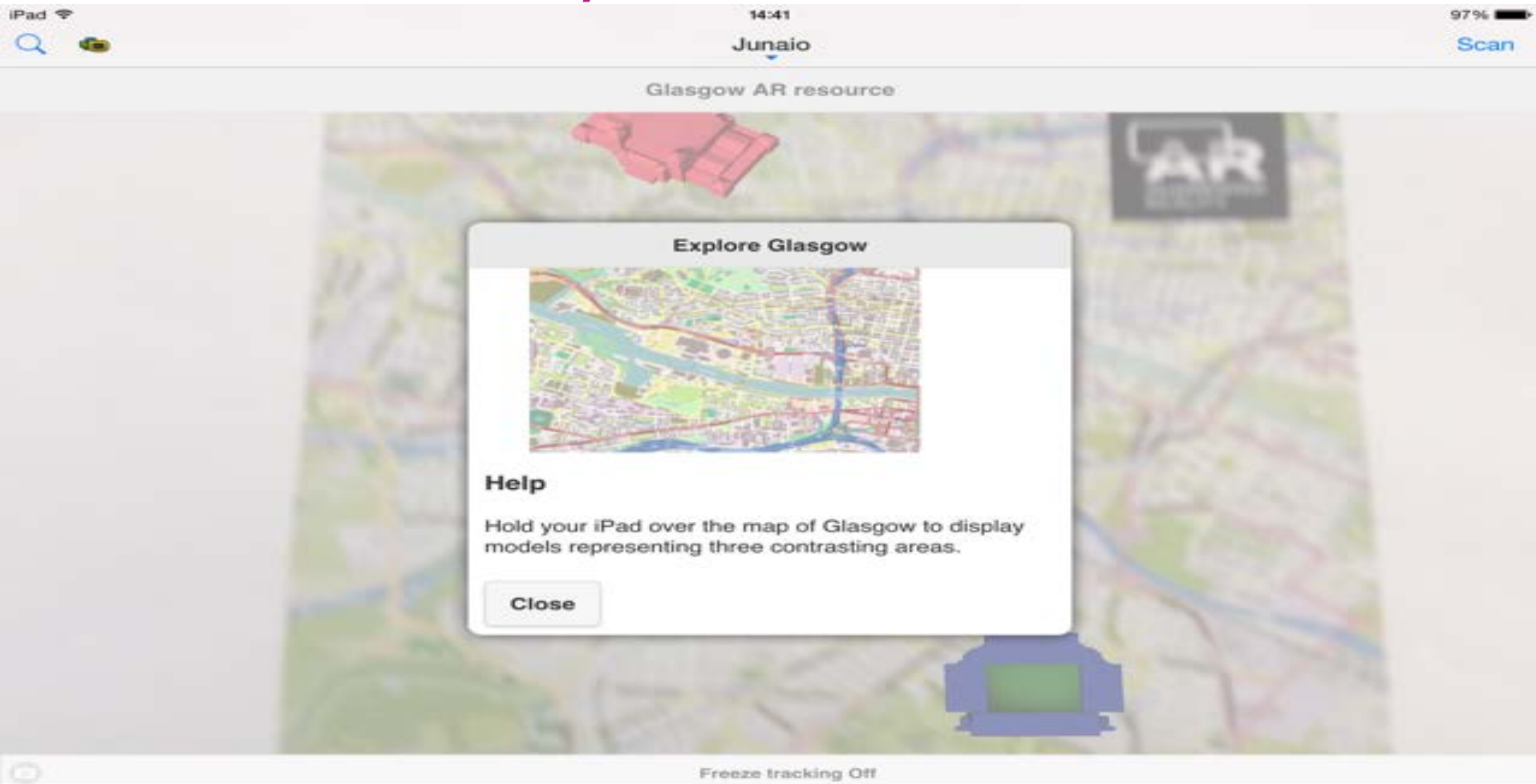
Uses Augmented Reality (AR) to produce an interactive learner resource for sociology students enabling them to delve into quantitative data on housing, crime and family.

- » Builds upon GCU Clydetown (modelled on Glasgow).
- » Embeds Augmented Reality (AR) technology.
- » Uses open source code.
- » Accessible via the Junaio Augmented Reality platform and can be accessed via mobile App.
- » Draws upon UK Census data and health data from Information Services Division (ISD) Scotland.
- » Provides data on ethnicity, housing and health for 3 areas in “Clydetown”.

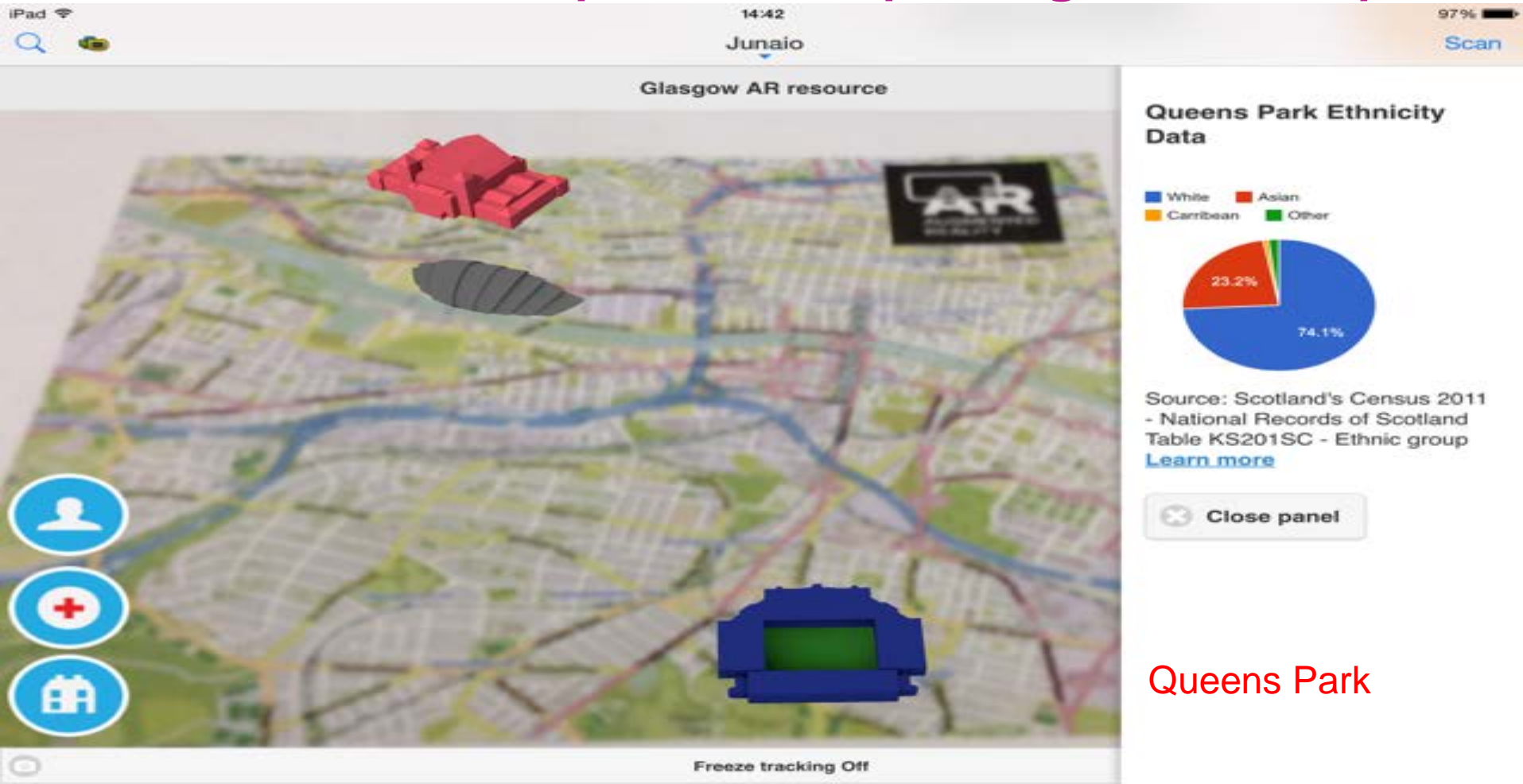




In 2013 the population for Glasgow City was 596,550

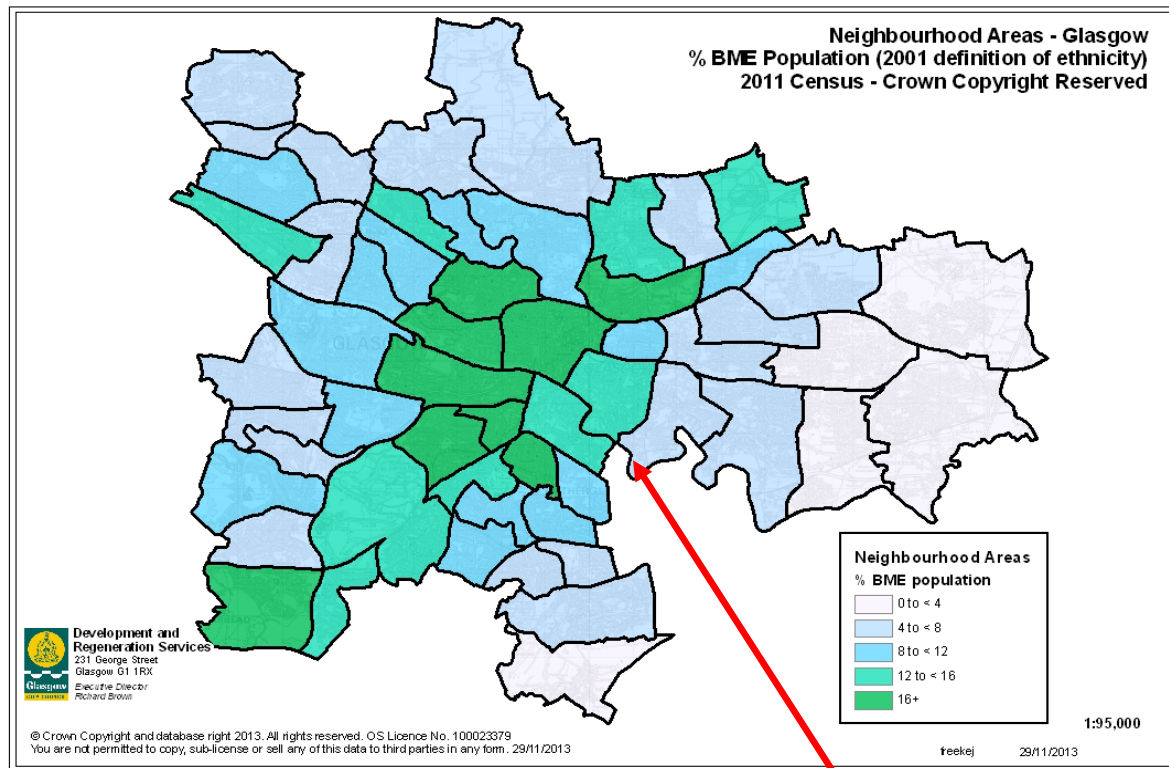








Ethnicity Profile in Glasgow

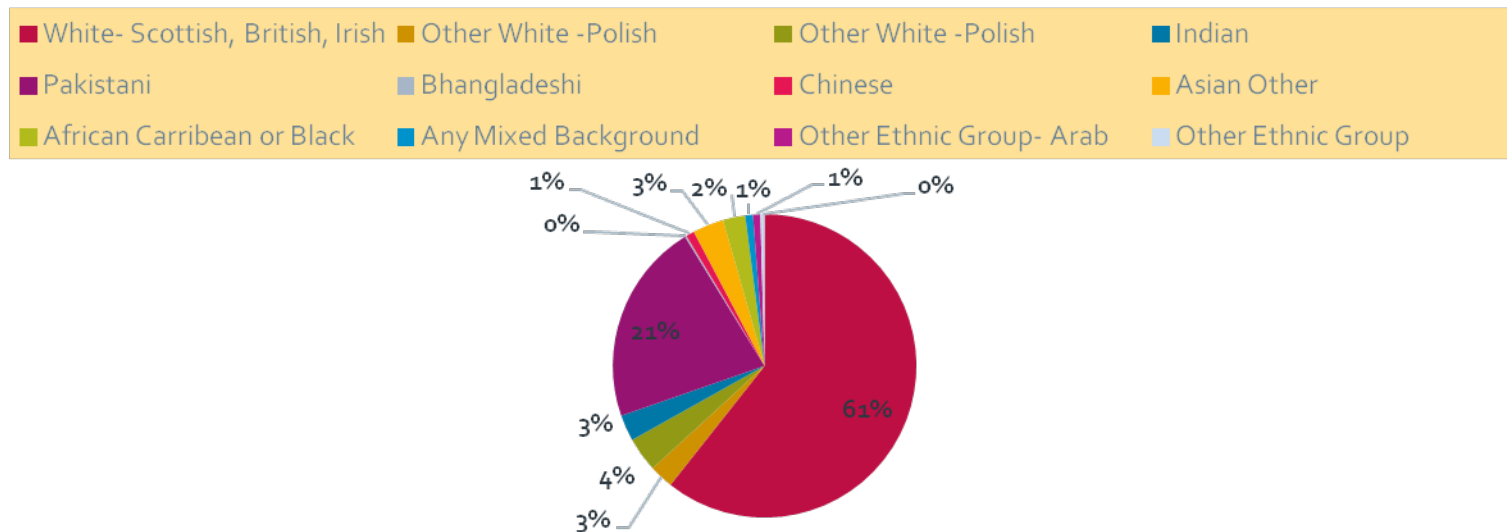


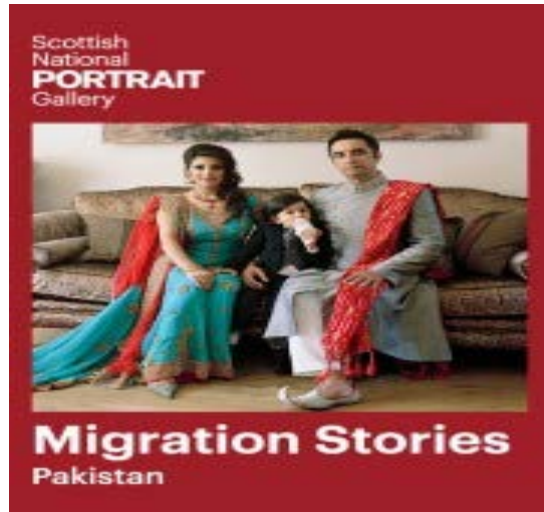
Govanhill
has 15,000
inhabitants.

42 different
nationalities
in one sq
mile.

Family is residing in Govanhill

- » Govanhill is one of the most racially diverse populations of Glasgow.
- » Recent reports have compared it to Ellis Island (The Scotsman, <http://www.scotsman.com/lifestyle/govanhill-glasgow-s-ellis-island-1-2783217>)






The Scenario- Cochlear Implant (CI) for a Pakistani Child in Govanill


- » Muhammad Ahmed and his wife came to UK from Pakistan 7 years ago and live in Govanhill with the paternal parents.
 - » The flat is cramped with 3 generations living together.
 - » Their four year old son has an acute hearing impairment and the couple have been asked to consider a unilateral cochlear implant.
 - » Both parents have normal hearing and there is no history of deafness in the family.
 - » They are anxious about the surgical procedure, complications and aesthetic appearance.
 - » A recent BBC debate regarding cochlear implants and deaf culture has also added to their anxieties.
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- » The grandparents are resistant to any surgical intervention. It has taken them a while to accept the child's impairment.
- » Initially they thought the child had limited capabilities and was cognitively deficient but they acknowledge he is bright.
- » They do not want the child to "look different" and worry about the quality of hearing he will have post implantation.
- » They are suspicious of the number of vaccines the toddler has had and are against further vaccination of the child.
- » They will not divulge the nature of their concerns.



Team Based Learning (TBL) Approach

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- Preparatory Materials- incl. pre-reading of reference materials and use of AR Resource

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- Individual Readiness Assurance Test
 - Online Formative Assessment- Knowledge

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- The IPE Scenario- Discussion and Debate
 - Online Tutor Moderation and Clarification

- » The students are assigned to online multiprofessional groups consisting of a health visitor, pharmacist, social worker, audiologist and medic (n=5).
 - » In preparation for the online IPE activity they are required to familiarise themselves with Govanhill's population, housing and health using the IPE in the City OER.
 - » Each group has to research the potential complications of CI, summarise the risk and benefits of CI, summarise the standard child vaccination schedule and detail any FDA vaccination recommendations pre implantation.
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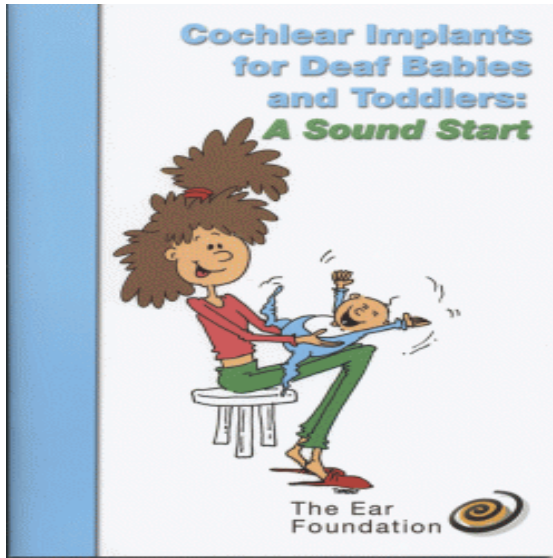
- » Each group discusses the arguments presented by the Deaf community for and against Cochlear Implantation.

 - » They share summary notes online with the other student groups.

 - » Groups are then paired and asked to act as advocates for the child recipient of the CI with online discussion and debate addressing:
 - › Culture, ethnicity and decision making processes
 - › Deaf culture and identity
 - › Risks and benefits of Cochlear Implants
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» Resources

- » Scambler S, Cochlear Implants and Identity Politics: A Parents Perspective. Medical Sociology Online, Vol 7; February 2013, 3 – 42.



Self evaluation is encouraged via the AR Apps FAQs and a formative assessment is completed by each student to demonstrate their preparedness for the online debate.

- » BBC broadcast debate around Cochlear Implants William Mager and Craig Crowley take part in a discussion about cochlear implants sparked off by the emotional video of a woman who had her cochlear implant was switched on.
 - » <http://www.bbc.co.uk/programmes/p01wmgs1> (avail. Tue 1 Apr 2014)
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» 1. Acoustic Simulations of Cochlear Implants

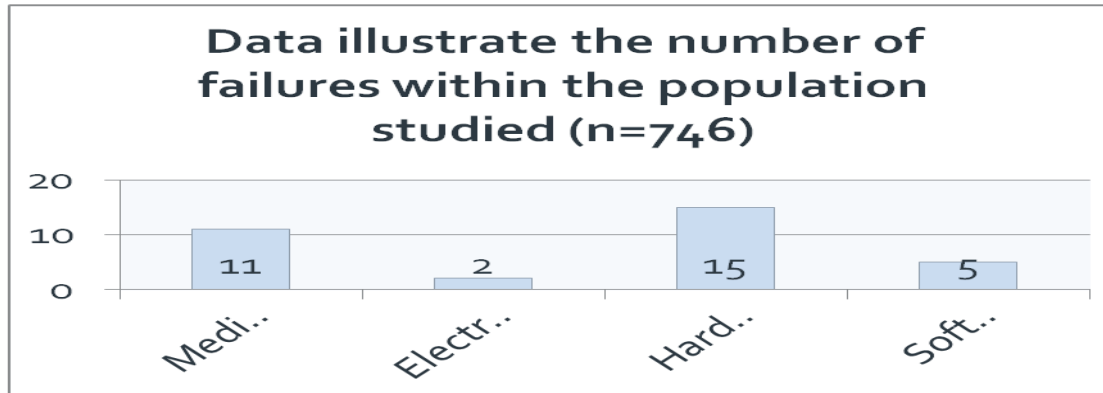
<http://hesp.ent.uci.edu/drupal/simulations>

These simulations were based on a study by Shannon, Zeng, Wygonski, Kamath, and Ekelid (1995), in which they showed that for normal-hearing listeners who are native speakers of English, 3 to 4 channels are sufficient to provide almost perfect speech recognition. Similar results were also obtained using Chinese speech materials (Fu, Zeng, Shannon, and Soli, 1998). In these simulations, you will hear a male speaker speaking a sentence, then counting from 1 to 10. You won't be able to understand anything with 1-channel simulation. You may understand a few words with 2-channel simulation. You should understand the entire sentence with 3 or 4 channels. If you are not a native speaker, you may need 6 or 8 channels to fully understand the sentence.

- 1-channel cochlear implant simulation:
- 2-channel cochlear implant simulation:
- 3-channel cochlear implant simulation:
- 4-channel cochlear implant simulation:
- 6-channel cochlear implant simulation:
- 8-channel cochlear implant simulation:



- » Of the 746 cochlear implantations undertaken, 33 (4.7 per cent of adults and 4.1 per cent of children) had a registered failure requiring re-implantation.
- » However there was a significant difference in the mean time to device failure with averages of 60 months and 35 months in adults and children respectively.



Reference: Masterson L. et al, Cochlear implant failures: lessons learned from a UK centre, [J Laryngol Otol.](#) 2012 Jan;126(1):15-21.

- » Embedding AR technology to enable a rich blended learning OER which supports mobile, online delivery of IPE
 - » Builds upon the successful Clydetown simulation and employs a TBL approach.
 - » Encourages discussion of sensitive issues and develops skills in client advocacy and decision making in a safe, moderated and supportive environment.
 - » Online OER is optimal for geographical distant student populations and designed to complement existing Face-2-Face IPE experiences.
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- » Tutor and student feedback on the AR in the City has been positive.
 - » A number of HEIs and FE Colleges are drawing upon the teams skills in AR to enhance learner experience in a range of disciplines including medicine, pharmacy and sound engineering.
 - » First student evaluation of the IPE in the City Resource is scheduled for semester 2, January 2015.
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To share resources through Jorum contact me:



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